## **DECLARATION OF WILLIAM HOGG**

- 1. My name is William Hogg, and I am Senior Vice President of Network Planning and Engineering, AT&T Services, Inc. ("AT&T"). In that position, I am responsible for the wireline and wireless network engineering functions of the company. I manage the network capital plan and am charged with integrating acquired assets into the company. My wireless responsibilities range from expanding and increasing the capacity of our mobile broadband networks, to improving the quality of our wireless services, to planning and deploying new network technologies, including AT&T's current upgrade to Long Term Evolution ("LTE").
- 2. Prior to my current position, I served as President of Mobility Network

  Operations, where I oversaw all phases of network engineering, cell site, and other construction
  activities, and operations and maintenance across the entire wireless footprint. I hold Bachelor's
  and Master's degrees in Electrical Engineering from the Georgia Institute of Technology, as well
  as a Master's degree in Business Administration from the University of South Florida.
- 3. The purpose of this Declaration is to discuss (1) AT&T's ability to deploy Leap's AWS and PCS spectrum, much of which is unused, on AT&T's network, (2) AT&T's preliminary plans to integrate many of the Leap cell sites into AT&T's network, and (3) how the integration of Leap's spectrum and cell sites into the AT&T network will result in an improved network experience for customers of both companies.
- 4. As explained in the Declaration of S. Douglas Hutcheson, Leap holds AWS and PCS spectrum in various parts of the country that it has not deployed, including spectrum covering approximately 41 million people outside its network footprint.<sup>1</sup> Within its network

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<sup>&</sup>lt;sup>1</sup> Declaration of S. Douglas Hutcheson ¶ 10.

footprint, Leap has deployed only about 42% of its spectrum,<sup>2</sup> meaning that there are a significant number of spectrum licenses for which Leap is utilizing only a portion of a spectrum band or is not utilizing a spectrum band at all.

- 5. According to Mr. Hutcheson, with regard to the spectrum that Leap currently is using, Leap primarily has deployed its spectrum to support 3G CDMA EVDO technology,<sup>3</sup> which is less spectrally efficient and supports lower throughput speeds than AT&T's 4G HSPA+ and LTE networks. While Leap has deployed LTE in a handful of metro areas, those deployments have been in small block 3x3 MHz or 5x5 MHz configurations that generally support throughput speeds on par with AT&T's HSPA+ network and lower than AT&T's more robust LTE network, which typically deploys 10x10 MHz configurations.<sup>4</sup>
- 6. AT&T now covers more than 225 million people with its 4G LTE network. The company's LTE network is expected to cover nearly 270 million people in 400 markets by the end of 2013, and its LTE deployment is expected to be substantially complete by the summer of 2014. AT&T is currently deploying its 4G LTE network using AWS and Lower 700 MHz B and C Block spectrum. AT&T is in the process of deploying PCS spectrum for LTE service, and will begin commercial LTE service in that band in the initial markets (*e.g.*, Washington, D.C., Baltimore, Dallas, Philadelphia, New York City and San Francisco) by the end of this year. AT&T also plans to cover 300 million people by the end of 2013 with its 4G HSPA+ service, which uses PCS spectrum, as well as cellular spectrum.
- 7. Because Leap's spectrum holdings are complementary to AT&T's 4G spectrum deployments, AT&T will deploy Leap's spectrum in a more spectrally efficient manner that will

<sup>&</sup>lt;sup>2</sup> *Id*.

 $<sup>^{3}</sup>$  *Id.* ¶ 9.

 $<sup>^4</sup>$  *Id.* ¶ 11. AT&T deploys LTE in 5x5 MHz configurations at a minimum.

result in faster and better quality LTE service for *both* Leap and AT&T customers.<sup>5</sup> In license areas where Leap's AWS spectrum is contiguous, or is contiguous with AT&T's spectrum, AT&T will be able to deploy LTE services in larger, more robust, contiguous 10x10 MHz (or greater) blocks of spectrum. In many areas, for example, the transaction will give AT&T a contiguous 10x10 MHz block of AWS where AT&T currently has *none* (*e.g.*, Philadelphia, Pa.; Washington, D.C.; Houston, Tex.; St. Louis, Mo.; Baltimore, Md.; San Diego, Cal.; Plaquemines, La..; Alton-Granite City, Ill.; Oconee, S.C.; and Pine Bluff, Ark.). In other license areas, the transaction will permit AT&T to move from a 5x5 MHz deployment to a contiguous 10x10 MHz or greater AWS deployment (*e.g.*, Lafayette, La.; Racine, Wis.; Las Cruces, N.M.; Hinesville, Ga.; and Jennings, La.).

8. AT&T preliminarily has determined that it will be able to deploy Leap's unused, contiguous AWS spectrum in as little as 60 to 90 days, in the markets where AT&T currently anticipates it will already be utilizing AWS spectrum for LTE service at the time of closing. This includes approximately 50 CMAs, covering metropolitan areas such as Denver, Colo.; Greenville, S.C.; and Baton Rouge, La., as well as less populated areas such as Bryan-College Station, Tex.; Lincoln, Ill.; and Clinton, Okla. Moreover, based on AT&T's current plans for deploying additional spectrum to expand LTE capacity in certain markets, AT&T preliminarily estimates that it will be able to deploy unused Leap spectrum in many additional areas within 12 months after the close of this transaction. This would include over 160 CMAs, encompassing large metropolitan areas such as Chicago, Ill.; Washington, D.C.; San Diego, Cal.; and

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<sup>&</sup>lt;sup>5</sup> Because AT&T also uses PCS spectrum for AT&T's HSPA+ technology, AT&T will have the flexibility to use a portion of Leap's PCS spectrum on AT&T's HSPA+ network as required to support transitioning customers.

Milwaukee, Wis., as well as less populated areas such as Chase, Neb.; Piute, Utah; and Hudspeth, Tex.

- 9. With respect to the spectrum Leap is currently using, declining traffic on Leap's networks as customers transition to AT&T's networks will likely present a myriad of opportunities to refarm Leap spectrum into AT&T's LTE network even before the full customer migration and network integration is completed. AT&T's preliminary integration plans call for the full transition of Leap's customers to AT&T's network in all affected markets within 18 months after closing.
- 10. AT&T will be able to integrate many existing Leap cell sites into its network, providing greater cell density, increasing network capacity, and improving network performance in these areas for customers of both companies. A preliminary analysis of Leap cell sites, based on the proximity to existing AT&T cell sites, indicates that AT&T will be able to productively integrate a few thousand Leap sites into its network. The remaining Leap sites will be decommissioned. The analysis of sites that can be productively integrated is necessarily preliminary at this point in the transaction process. AT&T will be able to determine more precisely the number and location of Leap sites to be integrated after AT&T audits the Leap cell sites and completes network transition planning.
- 11. Customers of both companies will experience faster, higher quality services over the enhanced and expanded networks that will result from the deployment of unused spectrum, the integration of the Leap and AT&T networks, and the densification of cell sites. As a result of AT&T's generally more spectrally efficient HSPA+ and LTE technologies, customers of both companies, in particular Leap customers who only have access to CDMA EVDO services today, will see improvements in throughput speeds and latency. For example, in markets where Leap

offers only CDMA EVDO service (*e.g.*, Washington, D.C.; St. Louis, Mo.; Chattanooga, Tenn.; San Diego, Cal.; Moffat, Colo.; Pine Bluff, Ark.; and Steubenville-Weirton, Ohio), AT&T operates much faster HSPA+ and LTE networks. And in the vast majority of the areas where Leap has spectrally inefficient small 3x3 MHz and 5x5 MHz block LTE deployments, AT&T already is typically deploying spectrum in LTE configurations of 10x10 MHz (*e.g.*, Philadelphia, Pa.; Houston, Tex.; Tucson, Ariz.; Wilmington, Del.; Las Vegas, Nev.; and Brownsville, Tex.). These speed and spectral efficiency improvements translate into an improved customer experience, including, among other benefits, faster streaming of video, faster uploading of image and video files, and a more responsive and robust web browsing experience.

- 12. Leap customers also will enjoy access to AT&T's nationwide network post-transaction, rather than relying on third-party networks outside of Leap's limited network footprint, further expanding the benefits of more seamless service and a better customer experience. Greater cell site density will enable faster data speeds and improved coverage by reducing places where customers experience dropped connections, dead spots, and coverage gaps. Overall, AT&T and Leap customers will experience improvements in network accessibility and retainability.
- 13. AT&T has the experience, management team, and resources necessary to quickly integrate Leap's CDMA customers and network into AT&T's HSPA+ and LTE network, having successfully transitioned CDMA networks and customers in previous transactions, including the acquisition of divested Alltel assets in 2010 and the merger with Centennial Communications Corp. in 2009.

<sup>&</sup>lt;sup>6</sup> The peak data rate for a 10x10 MHz block, for example, is twice that of a 5x5 MHz block.

I declare under penalty of perjury that the foregoing is true and correct. Executed on August 1, 2013.

Signed:

William Hogg

Senior Vice President of Network

Planning and Engineering

AT&T Services, Inc.